FISCAL YEAR 2019

STATE CLEAN DIESEL GRANT PROGRAM

WORK PLAN AND BUDGET NARRATIVE TEMPLATE

INSTRUCTIONS: States and territories applying for FY 2019 DERA State Clean Diesel Grant Program funding must use this template to prepare their Work Plan and Budget Narrative.

Please refer to the FY 2019 STATE CLEAN DIESEL PROGRAM INFORMATION GUIDE for full Program details, eligibility criteria and funding restrictions, and application instructions.

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SUMMARY PAGE

Project Title: FY19 State Clean Diesel Grant, Utah Department of Environmental Quality

Project Manager and Contact Information

[redacted]

Project Budget Overview:

	FY 2019
EPA Base Allocation	$318,621
State or Territory Voluntary Matching Funds (if applicable)	$328,750
EPA Match Incentive (Bonus) (if applicable)	$159,311
Mandatory Cost-Share	$1,271,250
TOTAL Project Cost	**$3,064,182**
Other Leveraged Funds	$986,250

Project Period

October 1, 2019 – September 30, 2021

Summary Statement

The Utah Department of Environmental Quality (UDEQ), Division of Air Quality (DAQ) proposes to use FY 2019 State Clean Diesel Program funds for Class 5-8 diesel vehicle replacements and nonroad diesel equipment replacements. Priority will be given to vehicles/equipment that operate in the Logan, Provo, and Salt Lake, UT, $PM_{2.5}$ non-attainment areas and the Northern and Southern Wasatch Front ozone nonattainment areas.

The webpage URL for Utah Clean Diesel Projects is: cleandiesel.utah.gov.

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SCOPE OF WORK

STATE/TERRITORY GOALS AND PRIORITIES: [*A description of the air quality within the state or territory, the quantity of air pollution produced by the diesel fleet in the state or territory, and the primary sectors (e.g. highway, marine vessels, construction equipment) that make up the state's or territory's diesel fleet (both public and private).*]

DAQ is proposing to target $PM_{2.5}$ (particulate matter), NO_x (nitrogen oxides), and VOC (volatile organic compounds) emissions by replacing eligible medium- and heavy-duty diesel vehicles and nonroad diesel equipment with current model year vehicles/equipment. Priority will be given to vehicles/equipment that operate in the Logan, Provo, and/or Salt Lake, UT, 24-hour particulate matter $(PM)_{2.5}$ nonattainment areas (NAA) and the Northern and Southern Wasatch Front ozone nonattainment areas in an effort to comply with the National Ambient Air Quality Standards (NAAQS). The counties included in these designations are: Box Elder, Cache, Davis, Salt Lake, Tooele, Utah, and Weber.

These areas experience exceedances of the 24-hour $PM_{2.5}$ standard during temperature inversions in the winter months. The Wasatch Mountains, Oquirrh Mountains, and Traverse Mountains create a bowl that surrounds lowland valleys where Utah's population is concentrated. This unique topography blocks horizontal air movement, causing air masses to stagnate in population centers where vehicles are abundant. During the cold winter months, temperature inversions develop where a warmer air mass sits on top of a colder air mass. Very little vertical air exchange happens during an inversion and the warm air acts as a lid on top of a bowl, trapping air and pollution. Primary and secondary $PM_{2.5}$ build and cannot dissipate until a strong weather system moves through. The air stagnation and pollution buildup results in exceedances of the 24-hour $PM_{2.5}$ NAAQS. Consequently, the EPA has classified the Provo and Salt Lake areas as serious nonattainment areas for 24-hour $PM_{2.5}$ and the Logan area as a moderate nonattainment area for $PM_{2.5}$

More than 80% of the state's population live and work in the Salt Lake and Provo $PM_{2.5}$ nonattainment portions of the Wasatch Front where construction projects and major transportation systems are most prevalent. Because the Wasatch Front is only approximately 18 miles wide, most of the land within this area has been developed and has experienced rapid growth from Utah's aggressive economic development trends. The Wasatch Front is a central point for national freight distribution and is home to thousands of warehouses, distribution centers, and terminals for the country's largest trucking companies, carriers, and suppliers, creating a high presence of diesel freight traffic, over 1,624,223,883 vehicle miles traveled, that contribute to over 18,304 tons of pollution annually[1].

North of the Wasatch Front, the Logan $PM_{2.5}$ nonattainment area located in Cache County has similar topography to the Wasatch Front. The Cache Valley is approximately 4,500 feet above sea level and is almost entirely surrounded with steep mountains reaching over 9,000 feet above

[1] UDEQ 7-County, Heavy-Duty Diesel Vehicle Inventory (2017 Annual)

sea level, forming a bowl around the valley. During the winter, sub-freezing temperatures, snow-covered ground, and stagnant high-pressure systems result in dense fog formation and temperature inversions over the valley, trapping pollution near the valley floor. The Logan nonattainment area has received national attention for having some of the worst air quality in the country during the inversion season and experiences approximately 41,847,940 vehicle miles traveled annually by heavy-duty diesel vehicles[2].

While Utah's meteorology and unique natural characteristics are important factors in the buildup of fine particulate in its nonattainment areas, the majority of the $PM_{2.5}$ that builds up during these pollution episodes is formed through complex chemical reactions involving volatile organic compounds (VOCs) and NOx. Those same VOCs and NOx also contribute to the formation of ozone, which is a summertime issue along the Wasatch Front when sunlight causes chemical reactions to occur between them to produce ozone.

On April 30, 2018, EPA Administrator Scott Pruitt signed a final notice designating the Northern and Southern Wasatch Front and the Uinta Basin (Duchesne and Uinta counties) as marginal nonattainment areas for the 2015 8-hour ozone standard.

Medium- and heavy-duty diesel vehicles are the largest mobile source contributors of NOx emissions in the nonattainment areas, representing half of the on-road mobile sources category. Falling into these vehicle engine categories, medium- and heavy-duty diesel vehicles and nonroad diesel equipment remain a priority to DAQ for diesel emissions reductions. DAQ will target vehicles/equipment that operate in the nonattainment areas, specifically those considered to be in or near Environmental Justice Areas.

VEHICLES AND TECHNOLOGIES: [*A description of the eligibility, number, types and typical use, and ownership of vehicles, engines, and/or equipment targeted for emission reductions. Eligibility of vehicles is defined in Section VIII.B of the Program Guide. A description of all verified and/or certified technologies to be used or funded by the applicant. Eligibility of technologies is defined in Section VIII.C of the Program Guide.*]

Eligibility of participating vehicles and equipment will be determined by their engine model year and tier levels, gross vehicle weight ratings, horsepower, status of operation, level of use, remaining useful life, location of use, fleet owners' retirement schedules and ability to meet the mandatory match requirements, and program timelines. Eligibility will also be based on the condition that the replaced engine will be permanently disabled.

DAQ is aiming to replace five Class 8 short- and long-haul trucks, engine model years 1996-2009, and six Class 5-7 short-haul trucks, engine model years 1996-2009, owned by various local fleet owners/operators, such as independent service providers for mail/package deliveries; retailers for residential and commercial plumbing, heating and cooling, irrigation and hydronics,

[2] UDEQ 7-County, Heavy-Duty Diesel Vehicle Inventory (2017 Annual)

and auto parts; and other local suppliers and delivery services. The target vehicles run daily local routes from central warehousing and distribution facilities and rail yards to various retail, business, and residential locations. Public fleet vehicles/equipment used for local and state government operations such as maintenance and construction projects, will also be targeted.

In addition, three 51- 300 horsepower nonroad diesel equipment units from unregulated to Tier 3 will be replaced with Tier 4 equipment, and two 301 and higher horsepower nonroad diesel equipment units from Tier 0 to Tier 3 will be replaced with Tier 4 equipment. The target nonroad equipment types and typical use will include agriculture, construction, and cargo handling owned by private and public fleet owner/operators.

When evaluating vehicles/equipment for eligibility, DAQ will prioritize projects that have a minimum of three years remaining in the useful life of the vehicle/equipment at the time of replacement or that aren't scheduled to be replaced until 2023 or later.

According to the California Air Resources Board (CARB) Executive Orders for current on-highway engine model years, new certified engine technologies include the following emissions control systems: direct diesel injection (DDI), turbo charger (TC), charge air cooler (CAC), engine control module (ECM), exhaust gas recirculation (EGR), oxidizing catalysts (OC), periodic trap oxidizer (PTOX), selective catalytic reduction - urea (SCR-U), ammonia oxidation catalyst (AMOX), and on-board diagnostics (OBD). Also, all 2007 and newer heavy-duty, diesel engines are required to have closed crankcase ventilation systems or route the crankcase emissions to the exhaust up-stream of exhaust aftertreatment systems. Current model year engines meet the following emissions standards: 0.14 grams/break hp-hour (g/bhp-hr) for non-methane/hydrocarbon (NMHC), 0.20 g/bhp-hr for oxides of nitrogen (NO_x), 15.5 g/bhp-hr for carbon monoxide (CO), and 0.01 g/bhp-hr for PM.

CARB's engine certifications for current off-road engine models show the manufacturers have included the following emissions controls for engine sizes ranging from ~75 hp to ~500 hp: electronic direct injection (EDI), diesel oxidation catalyst (DOC), TC, CAC, ECM, OC, EGR, and SCR-U, and AMOX.

ROLES AND RESPONSIBILITIES: [*A discussion of the roles and responsibilities of the state or territory and any other project partners, contractors, or subgrantees. State and territories should indicate whether their Program funds will support grant, rebate, and/or loans, and provide a detailed description of their disbursement methodology.*]

DAQ will assign two full-time employees to coordinate, monitor, and oversee these projects to ensure successful use of grant funds throughout the project period, report on progress, and promote its success. DAQ staff will establish criteria and requirements for participation, determine project eligibility, monitor and report on progress, oversee contracts and budget, and promote program accomplishments.

Through contractual obligation, participating fleet owners/operators will be responsible for demonstrating that their vehicle(s)/equipment are eligible to participate in the grant, purchasing

the new vehicles/equipment, providing the mandatory cost-share, meeting program requirements, and submitting required documentation to DAQ.

FY19 State Clean Diesel Grant program funds will support grants to be dispersed as reimbursements to the fleet owners for allowable costs of the new vehicle/equipment purchases, upon demonstration by the fleet owners that grant requirements have been met. DAQ will consider the reimbursements as participant support costs.

TIMELINE AND MILESTONES: [*A detailed timeline for the project including milestones for specific tasks, such as subgrant or rebate program development, solicitation of project partners, making subawards, program/project implementation, procurement and installation of equipment, monitoring and oversight of projects, and reporting.*]

FY2019 Project Timeline:

- October 2019: Announce project award on Utah Clean Diesel Program website and introduce program to fleet owners/operators.
- November – December 2019: DAQ opens a two-month application period for fleet owners/operators to submit potential vehicle/equipment replacement projects for evaluation to participate.
- January 2020: DAQ submits quarterly reports to EPA.
- January-February 2020: DAQ evaluates potential projects.
- March 2020: DAQ identifies successful projects.
- March - April 2020: DAQ develops award letters, grant agreements, and terms and conditions documents for successful participants.
- April 2020: DAQ submits quarterly reports to EPA.
- May 2020: DAQ meets with participating fleet owners/operators to review grant processes and requirements.
- June 2020: DAQ submits quarterly reports to EPA. Grant agreements are finalized.
- June - July 2020: Participating fleet owners/operators submit vehicle/equipment photos and documentation to DAQ for demonstration of eligibility. DAQ submits quarterly reports to EPA.
- July - August 2020: DAQ reviews vehicle/equipment photos and documentation to verify eligibility and gives approval to fleet owners/operators to obtain a minimum of two bids for new vehicle/equipment purchases.
- August – September 2020: Participating fleet owners/operators submit two bids for new vehicle/equipment purchases to DAQ for review.
- September – October 2020: DAQ reviews bids for new vehicle/equipment purchases and provides approval to fleet owners/operators to order new vehicles/equipment.
- October 2020: DAQ submits quarterly reports to EPA.
- January 2021: DAQ submits quarterly reports to EPA.
- February – April 2021: Fleet owners/operators place into service new vehicles/equipment and submit invoices, proof of payment, and photos of new vehicle/equipment engine plates to DAQ.

[*Please delete all text that is bracketed and in italics*.]

- April 2021: DAQ submits quarterly reports to EPA.
- March – June 2021: Participating fleet owners/operators remove from service and permanently disable original vehicles/equipment and submit scrappage documentation to DAQ for approval. DAQ submits quarterly reports to EPA.
- May – July 2021: DAQ reviews and approves scrappage documentation and other grant documentation submittals and issues reimbursements to fleet owners/operators.
- August – September 2021: DAQ prepares final evaluations of outputs and outcomes.
- December 2021: DAQ submits final report to EPA.

DERA PROGRAMMATIC PRIORITIES: [*A discussion of how, in providing grants, rebates, and loans under the Program, the state or territory will ensure that projects selected for funding supports the programmatic priorities as defined in Section VIII.D of the Program Guide.*]

1) **Designated Nonattainment Areas:**

DAQ will give priority to vehicles/equipment that operate predominately (a minimum of 50%) in Utah's $PM_{2.5}$ and ozone nonattainment areas: Box Elder, Cache, Davis, Salt Lake, Tooele Utah, and Weber counties.

Air Toxics Assessment Areas:

According to the 2011 National Scale Air Toxics Assessment, Utah has two counties where all or part of the population is exposed to more than 2.0 $\mu g/m^3$ of diesel particulate matter emissions—Salt Lake and Washington Counties. The target vehicles will be loading at distribution centers within Salt Lake County and making daily local deliveries throughout these counties.

2) **Goods Movement:**

As the "Crossroads of the West" for freight traffic, Utah provides a life-line to critical transportation arteries for freight distribution coast to coast and between Canada and Mexico. Interstates 15, 80, 84, and 70 and other freight routes provide connections to Utah's central transportation network, which serves as a strategic hub for highway, rail, inter-modal, pipeline and air freight in the Western United States.

The central point of the western United States, Utah boasts access to inter-modal hubs for warehousing and distribution and is home to some of the country's largest trucking companies, carriers, and suppliers. The Salt Lake International Airport, Union Pacific Railroad, and thousands of distribution centers and terminals create a high presence of transportation. The target vehicles/equipment utilize these distribution centers and terminals as their home-base for sorting, prioritizing, moving cargo, and loading/unloading their daily deliveries. Hundreds of delivery trucks and diesel equipment are consolidated in these locations at the same times every day, creating a heavy presence of diesel emissions.

Goods movement is only expected to grow in the coming years as population is expected to double and state leaders work to position Utah for becoming a global logistics and distribution

hub to the world. Salt Lake City, the State's capital, will be home to an inland port, over 16,000-acres of multimodal freight distribution infrastructure that will provide strategic access to major interstates and highways, seaports, international airports, and railways.

Project Location		
State:	Utah	Utah
County:	Cache, Davis, Salt Lake, Utah, Weber	Cache, Davis, Salt Lake, Utah, Weber
City	Logan, Layton, Salt Lake, Provo, Ogden	Logan, Layton, Salt Lake, Provo, Ogden
Congressional District:	1, 2, 3, 4	1, 2, 3, 4
Zipcode:	84321, 84040, 84116, 84601, 84405	84321, 84040, 84116, 84601, 84405
Type and Number of Affected Vehicles:	-5 Class 8 on-highway -6 Class 5-7 on-highway	-1 Agriculture -3 Construction -1 Cargo Handling
% of Time Vehicles Spend in Area::	50-100%	50-100%
Nonattainment Area:	X	X
Air Toxic Assessment Area:	X	X
Goods Movement:	Terminals and Distribution Centers	Ports, Terminals, and Distribution Centers

EPA'S STRATEGIC PLAN LINKAGE AND ANTICIPATED OUTCOMES/OUTPUTS:
[*A discussion of how the projects selected for funding support the Agency's Strategic Plan, as well as a description of the environmental outputs and outcomes to be achieved under the Program, as defined in Section VIII.E of the Program Guide. To estimate some of the anticipated outcomes of the award (e.g. emissions reductions), EPA encourages states and territories to use the Diesel Emissions Quantifier found at: www.epa.gov/cleandiesel/diesel-emissions-quantifier-deq.*]

DAQ's goal for this funding opportunity is to make progress toward meeting attainment of the NAAQS by reducing pollutants that contribute to the wintertime $PM_{2.5}$ and summertime ozone

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issues the state experiences. To achieve this, the following outputs and outcomes[3] will be accomplished:

Activities	Outputs	Outcomes						
			Approximate Diesel Equivalent Gallons of Fuel Conserved	NO_x (short tons)	$PM_{2.5}$ (short tons)	HC (short tons)	CO (short tons)	CO_2 (short tons)
Replace five short-haul combination Class 8 diesel trucks	Five diesel trucks, average engine model year 2003, permanently disabled and replaced with engines that meet current EPA standards.	Annual Reductions	1,625	1.475	0.123	0.106	0.447	18.300
		Lifetime Reductions	4,875	4.426	0 368	0 319	1 340	54.800
		Lifetime Total Cost Effectiveness		$67,787	$814,786	$938,999	$223,873	$0
		Lifetime Capital Cost Effectiveness		$67,787	$814,786	$938,999	$223,873	$0
Replace six short-haul combination Class 5-7 diesel trucks	Six diesel trucks, average engine model year 2003, permanently disabled and replaced with engines that meet current EPA standards.	Annual Reductions	2,922	1 820	0.106	0.159	0 668	32.9
		Lifetime Reductions	8 766	5.461	0 317	0.478	2 003	98.6
		Lifetime Total Cost Effectiveness		$28,018	$482,450	$320,070	$76,393	$1,292
		Lifetime Capital Cost Effectiveness		$28,018	$482,450	$320,070	$76,393	$1,292
Replace three nonroad 51-300 horsepower diesel equipment	One agricultural 'other', Tier 1, 75 horsepower, average engine model year 2002, permanently disabled and replaced with equivalent equipment that meets current EPA standards	Annual Reductions		0.461	0 025	0 006	0.165	0.000
		Lifetime Reductions		0 288	0 042	0 024	0 207	0.000
		Lifetime Total Cost Effectiveness		$231,806	$1,635,646	$2,753,781	$321,743	$0
		Lifetime Capital Cost Effectiveness		$231,806	$1,635,646	$2,753,781	$321,743	$0
	One construction 'other', Tier 1, 300 horsepower, average engine model year 2002, permanently disabled and replaced with equivalent equipment that meets current EPA standards	Annual Reductions		0 672	0 042	0 011	0 268	0 0
		Lifetime Reductions		1 382	0 076	0 019	0.495	0 0
		Lifetime Total Cost Effectiveness		$24,115	$440,624	$1,786,559	$57,401	$0
		Lifetime Capital Cost Effectiveness		$24,115	$440,624	$1,786,559	$57,401	$0
	One cargo 'other material handling', Tier 1, 175 horsepower, average engine model year 2002, permanently disabled and replaced with equivalent equipment that meets the current EPA standards.	Annual Reductions		0.101	0 008	0 01	0 033	0 0
		Lifetime Reductions		0 302	0 024	0 030	0 098	0 0
		Lifetime Total Cost Effectiveness		$165,370	$2,063,610	$1,673,528	$510,244	$0
		Lifetime Capital Cost Effectiveness		$165,370	$2,063,610	$1,673,528	$510,244	$0
Replace two nonroad 301+ horsepower diesel equipment	Two construction 'other constuction equip', Tier 1, 500 horsepower, average engine model year 1997, permanently disabled and replaced with equivalent equipment that meets current EPA standards.	Annual Reductions		2 210	0.117	0 036	0 852	0 0
		Lifetime Reductions		6 628	0 351	0.107	2 557	0 0
		Lifetime Total Cost Effectiveness		$60,345	$1,140,056	$3,734,913	$156,443	$0
		Lifetime Capital Cost Effectiveness		$60,345	$1,140,056	$3,734,913	$156,443	$0
	Totals	Annual Reductions	4,547	6.738	0.421	0.328	2.432	51.2
		Lifetime Reductions	13,641	18.488	1.178	0.977	6.699	153.410
		Lifetime Total Cost Effectiveness		$577,441	$6,577,171	$11,207,850	$1,346,097	$1,292
		Lifetime Capital Cost Effectiveness		$577,441	$6,577,171	$11,207,850	$1,346,097	$1,292

Additional Outputs and Outcomes:

- Activities contribute toward demonstration of attaining the NAAQS
- The implementation of air quality policies for freight movement and state fleet vehicles as evidenced through HB 433 (https://le.utah.gov/~2019/bills/static/HB0433.html) and SB 3, Pre-2007 State Vehicle Replacement Plan ((https://le.utah.gov/~2019/bills/static/SB0003.html)
- Community engagement through program implementation and sharing technical information and best practices for diesel fleet operators
- Partnerships with five to ten local dealerships and dozens of fleet owners
- Potential for 16 grant contracts/agreements with fleet owners
- Quarterly and final reporting to EPA for accounting of measurable performance throughout the project period, with summaries of environmental outcomes through the final report

[3] Calculations are from EPA's Diesel Emissions Quantifier and CO_2 reductions reflect EPA's Greenhouse Gas Emissions Standards for medium and heavy-duty vehicles

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- Distribution of program accomplishments related to the environmental activities through program branding, websites, State of Environment reports, press releases, public involvement processes, and social media
- New vehicle purchases encourage the inclusion of idle-reduction technologies and SCR technology in the engine configuration that reduces the EGR and diesel particulate filter regeneration duty cycles, which can improve fuel economy 3-5%, according to Diesel Technology Forum, dieselforum.org
- Changes in driver behavior for turning off engines during idle time due to more reliable engines
- Scrappage of 16 outdated, dirty diesel engines

SUSTAINABILITY OF THE PROGRAM: [*A description of the state's or territory's plan for sustaining the project beyond the assistance agreement period. Additionally, describe the state's or territory's plan for publicizing and promoting the benefits of the activities within the state or territory.*]

In addition to promoting diesel emissions reduction activities via the Utah Clean Diesel website, DAQ incentives page, social media, promotional projects, and public outreach events, DAQ will promote and continue efforts to reduce emissions after EPA funding for this project has ended through the following 2019 approved legislation, appropriations totaling $29,013,000 one-time funding and $45,400 on-going funding for air quality improvements, and other DAQ programs and activities. These emissions reduction initiatives are a result of Governor Herbert's 2017 goal to reduce emissions 25% by 2026:

- House Bill (HB) 148, Vehicle Idling Revisions – Reduces restrictions for enforcement of local anti-idling ordinances (https://le.utah.gov/~2019/bills/static/HB0148.html)
- HB 107, Sustainable Transportation and Energy Plan Act Amendments – amends the Sustainable Transportation Plan Act to include a large-scale natural gas utility. Includes a pilot program and provides for air quality improvements (https://le.utah.gov/~2019/bills/static/HB0107.html)
- HB 109, Hydrogen Fuel Production Amendments - provides $2,200 for fiscal year (FY) 2020 and $5,000 for FY 2021 - Modifies provisions related to Permanent Community Impact Fund and High Cost Infrastructure Development Tax Credit Act. Expands definition of "throughput infrastructure project" to include a facility that stores, produces, or distributes hydrogen as fuel in zero emission motor vehicles, for electrical generation, or for industrial use (https://le.utah.gov/~2019/bills/static/HB0109.html)
- HB 139, Motor Vehicle Emissions Amendments – Amends penalties for visible emissions ("rolling coal"), prohibits distraction or endangerment of vulnerable highway users by excessive exhaust, and adds reporting requirements (https://le.utah.gov/~2019/bills/static/HB0139.html)
- Senate Bill (SB) 2, Electric Vehicle Charging Stations at State Sites: Provides $2,000,000 one-time funding for electric vehicle charging stations at state sites (https://le.utah.gov/~2019/bills/static/SB0002.html)

[*Please <u>delete</u> all text that is bracketed and in italics*.]

- SB 2, Electric Vehicle Charging Equipment: Provides $4,990,000 one-time funding of incentives for businesses and government entities to install electric vehicle charging equipment (https://le.utah.gov/~2019/bills/static/SB0002.html)
- SB 3, Pre-2007 State Vehicle Replacement Plan: Provides $4,000,000 one-time funding for replacing 238 pre-2007 engine model year state diesel vehicles (https://le.utah.gov/~2019/bills/static/SB0003.html)
- SB 2, Weatherization: Provides $1,000,000 one-time funding for weatherization assistance that reduces energy consumption and NO_x emissions from home heating appliances (https://le.utah.gov/~2019/bills/static/SB0002.html)
- HB 218, Construction Code Modifications – Adopts the full commercial energy code (https://le.utah.gov/~2019/bills/static/HB0218.html)
- HB 353, Reduction of Single Occupancy Vehicle Trips Pilot Program Amendments – Provides $500,000 one-time funding for FY 2020 for free-fare transit on select poor air quality days (https://le.utah.gov/~2019/bills/static/HB0353.html)
- House Concurrent Resolution (HCR) R 9, Concurrent Resolution Commending Jordan School District on Its Fleet of Natural Gas School Buses – Commends Jordan School District for tis contribution to improved public health and fiscal responsibility by acquiring school buses that operate on compressed natural gas (https://le.utah.gov/~2019/bills/static/HCR009.html)
- HCR 11, Concurrent Resolution Encouraging the Purchase of Tier 3 Gasoline – Encourages gasoline retailers to purchase gasoline supply from the refineries who have committed to manufacturing Tier 3 compliant gasoline (https://le.utah.gov/~2019/bills/static/HCR011.html)
- HCR 3, Concurrent Resolution Urging the EPA to Update Switcher Locomotive Emission Standards – Urges EPA to update switcher locomotive emission standards to reduce harmful emissions (https://le.utah.gov/~2019/bills/static/HCR003.html)
- SB 21, Sunset Reauthorization, Air Conservation Act – Extends the repeal date of the Air Conservation Act (https://le.utah.gov/~2019/bills/static/SB0021.html)
- HB 433, Inland Port Amendments – Encourages all Class 5-8 designated truck traffic entering the authority jurisdictional land to meet the heavy-duty highway compression-ignition diesel engine and urban bus exhaust emission standards for year 2007 and later (https://le.utah.gov/~2019/bills/static/HB0433.html)
- Additionally, the DAQ Compliance Branch has made a new policy to, whenever allowed through Section 19-1-603(3) of the Utah Code, put 80% of settlement agreements into an Environmental Mitigation Response Fund (EMRF) for air quality emissions reductions programs. The most recent example of this comes from a final settlement agreement in February that resulted in a $56,000 payment into the fund. The DAQ Compliance Branch is in several other settlement negotiations that will likely lead to additional funds for the EMRF.
- Updated 2017 statewide emission inventory, including mobile sources, to be released in the summer of 2019 will be found at: https://deq.utah.gov/legacy/programs/air-quality/emissions-inventories/inventories/index.htm

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- SB 3, Mobile Monitoring Data Collection: Provides $50,000 one-time funding for air quality monitors on TRAX lines (https://le.utah.gov/~2019/bills/static/SB0003.html)
- SB 144, Environmental Quality Monitoring Amendments – Provides $517,800 for FY 2020 and $40,000 for FY 2021 for the UDEQ to create a baseline for monitoring air and water pollution from the Inland Port (https://le.utah.gov/~2019/bills/static/SB0144.html)
- The Utah legislature appropriated $500,000 per year ongoing for research to investigate the specific air quality problems that Utah faces. The research topics will include improving our understanding of atmospheric chemistry for $PM_{2.5}$ and ozone, improving Utah's emissions inventories, improving the understanding of regional pollutant transport, and the intersection of air quality regulations and health consequences.
- A rule was recently promulgated (R307-505) that requires oil and gas sources in the state to register with the DAQ. Required registration will improve the oil and gas emissions inventory and compliance assessments.
- Reclassification of the Salt Lake $PM_{2.5}$ nonattainment areas from Moderate to Serious, resulting in more stringent requirements for the State Implementation Plan (SIP). The Salt Lake Serious SIP was completed and submitted to EPA in December of 2018 and included updates to emissions inventories, including mobile sources, a mobile vehicle emissions budget, and a base year of 2016 and a 2019 attainment year. The plan is a documented commitment that demonstrates the DAQ's efforts to reduce emissions in order to attain the National Ambient Air Quality Standards. For more information, visit: https://deq.utah.gov/legacy/pollutants/p/particulate-matter/pm25/serious-area-state-implementation-plans/index.htm
- Public involvement for the development of the Serious Area SIP included input from environmental advocates, industry, local-government officials, and the general public. This input helped DAQ create a SIP that protects public health and allows economic growth.
- The Division holds monthly meetings with environmental advocates to discuss the Serious Area SIP development and other air quality planning issues. For more information, visit: https://deq.utah.gov/legacy/pollutants/p/particulate-matter/pm25/serious-area-state-implementation-plans/public-participation.htm
- DAQ wrote and is implementing approximately 30 new area source rules as part of the $PM_{2.5}$ SIP. The new rules address a broad range of sources, including the printing and coating industries, solid fuel burning, and consumer products high in VOCs. A significant amount of public outreach is necessary for the efficacy of these rules.
- DAQ has begun developing $PM_{2.5}$ Maintenance Plans for its $PM_{2.5}$ NAAs. These plans will demonstrate how DAQ will ensure the areas will maintain attainment of the NAAQS through 2035. DAQ expects to submit this plan to the EPA as soon as December 2019.
- SB 2 & 3, State Teleworking: Provides $6,253,000 one-time funding for state employee teleworking expenses with opportunities for more rural Utah employment (https://le.utah.gov/~2019/bills/static/SB0002.html, https://le.utah.gov/~2019/bills/static/SB0003.html)
- SB 2, Air Quality Messaging Campaigns: Provides $500,000 one-time funding for funds expanding year-round air quality messaging campaigns and includes new targeted areas (https://le.utah.gov/~2019/bills/static/SB0002.html)

[*Please <u>delete</u> all text that is bracketed and in italics*.]

- SB 2, Air Quality and Climate Research Study: Provides $200,000 one-time funding for a public-private partnership to prepare an air quality/changing climate roadmap for legislative consideration in the next general session (https://le.utah.gov/~2019/bills/static/SB0002.html)
- HB 357, Voluntary Wood Burning Conversion Program – Provides $9,000,000 one-time funding to incentivize homeowners to replace wood stoves and fireplaces with natural gas appliances (https://le.utah.gov/~2019/bills/static/HB0357.html)
- HB 411, Community Renewable Energy Act – Provides an innovative process for communities seeking a net 100% renewable energy, including PSC rule-making authority, options for customer participation, procedures concerning rates, and renewable energy resource acquisition (https://le.utah.gov/~2019/bills/static/HB0411.html)
- HCR 2, Concurrent Resolution Supporting Rural Development of Wind, Solar, Hydrogen, Hydroelectric, and Geothermal Energy - Promotes development of renewable energy in rural Utah (https://le.utah.gov/~2019/bills/static/HCR002.html)
- HCR 5, Concurrent Resolution Urging Policies that Reduce Damage from Wildfires – Urges federal government to pursue policies that allow for easier reduction of excess forest fuel loads to prevent fires. An increase in wildfires in 2018 had a significant negative effect on air quality (https://le.utah.gov/~2019/bills/static/HCR005.html)
- Through the Targeted Air Shed Grant Program, DAQ has been awarded $9,600,000 to DAQ for replacing residential wood-burning stoves and fireplaces with cleaner, natural gas inserts over the remaining four years of the program.
- Through the Targeted Air Shed Grant Program, $3.2 million has been awarded to DAQ for replacing Class 5-8 medium-and heavy-duty diesel vehicles in the Logan, UT, 24-Hour $PM_{2.5}$ Nonattainment Area over the remaining four years of the program.
- Through the Targeted Air Shed Grant Program, approximately $5,000,000 has been awarded to DAQ for replacing diesel school buses and implementing a vehicle repair and replacement program in the Logan, UT, 24-Hour $PM_{2.5}$ Nonattainment Area. The program has three years remaining.
- The Utah Legislature passed H.B 237, which creates a Clean Air Fund into which income tax payers can voluntarily donate money. The DAQ will administer these funds by providing grants to fund activities to improve air quality or by enhancing programs designed to educate the public about the importance of air quality.
- Through the VW Settlement, DAQ will implement NOx reduction projects by replacing government-owned Class 4-8 local diesel delivery trucks, shuttle buses, transit buses, and school buses and purchasing and installing electric vehicle supply equipment for government facilities.
- Through a GM ignition switch settlement, DAQ has secured five-years of funding to implement yard equipment exchanges that reduce emissions from snowblowers for the PM2.5 winter inversion season and lawn mowers and trimmers for the summer ozone season.

[*Please <u>delete</u> all text that is bracketed and in italics*.]

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BUDGET NARRATIVE

FY19 STATE CLEAN DIESEL GRANT PROGRAM BUDGET							
						Voluntary Match	
				EPA Allocation	Mandatory Cost-Share	VW Mitigation Trust Funds	Other Funds
Personnel (All Listed are 100% FTE)	Annual Salary			8.5% of Annual FTE for Two Years			
Environmental Planning Consultant	[redacted]						
Environmental Planning Consultant							
Financial Analyst II							
TOTAL PERSONNEL					$0	$0	$0
Fringe Benefits							
Calculated based on Personnel amount, and includ							
Retirement, 401k, Social Security, Medicare, Work							
Unemployment Insurance, Long Term Disability, T							
TOTAL FRINGE BENEFITS					$0	$0	$0
Travel							
In-state site visits; travel for 1 person, based on cost reimbursement	Estimated Rate:		Number:				
Hotel			0	$0			
Daily Per Diem			0	$0			
Mileage			-	$0			
TOTAL TRAVEL				$0	$0	$0	$0
Equipment	Cost/Unit		QTY				
				$0		$0	
				$0		$0	
TOTAL EQUIPMENT				$0	$0	$0	$0
Supplies							
TOTAL SUPPLIES							
Contractual							
	Labor rate ($/hour):		Duration (hours per unit):				
				$0		$0	
				$0		$0	
TOTAL CONTRACTUAL				$0	$0	$0	$0
Other (includes Participant Support Costs)							
	Cost/Unit	Quantity Funded by EPA Allocation	Quantity Funded by VW Mitigation Trust Funds				
Class 8 Diesel Vehicle Replacements	$180,000	3	2	$135,000	$405,000	$90,000	$270,000
Class 5-7 Diesel Vehicle Replacements	$85,000	3	3	$63,750	$191,250	$63,750	$191,250
Nonroad Equipment Replacements, 51-300 Horsepower	$200,000	2	1	$100,000	$300,000	$50,000	$150,000
Nonroad Equipment Replacements, 301+ HP Horsepower	$500,000	1	1	$125,000	$375,000	$125,000	$375,000
Building & Site Rental				$1,500			
Utilities				$750			
LAN/WAN				$359			
Phone				$250			
Printing/Photocopy				$250			
TOTAL OTHER		9	7	$426,859	$1,271,250	$328,750	$986,250
	Vehicle/Equipment Quantity Total	16					
TOTAL DIRECT				$472,213	$1,271,250	$328,750	$986,250
TOTAL INDIRECT (based on OMB Circular A-87 Cognizant Agency Negotiation Agreement. Percentage taken from personnel and benefits)			12.61%	$5,719			
TOTAL FUNDING				$477,932	$1,271,250	$328,750	$986,250
TOTAL PROJECT COST				$3,064,182			
				Administrative Costs (personnel, benefits, travel, supplies)		$45,354	
				% of EPA's Allocation		9%	

[Please delete all text that is bracketed and in italics.]

Matching Funds and Cost-Share Funds

States and territories must provide a detailed description of the source of funding for any voluntary match or mandatory cost-share funds included in the project budget, if applicable. Include details on when the match will be available for use. If applicable, include letters of financial support, which specifically indicate how supporting organizations will assist in the project.

See Sections V.D and X of the Program Guide for more information on the voluntary matching incentive and mandatory cost-share funds.

The mandatory match and other leveraged funds will come from the participating fleet owners cost-sharing 75% of the cost for new vehicles/equipment purchases. Upon verifying eligibility to participate, fleet owners will be contractually obligated to the 75% cost-share upon purchase of the new vehicles/equipment. The voluntary state match will come from the Volkswagen Settlement Trust Funds of $35,177,506, from which DEQ has dedicated seven percent to the DERA category. DEQ will be submitting a funding request to the Trustee for these funds by September, 2019.

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